

Vacuum and charging unit

iRockall HC

Vacuum and Flammable Refrigerant Charging Unit

iROCKALL HC is an evacuation and charging station for A2L, A2 A3 Class refrigerants and not flammable classes. It is easy to handle and has high charging accuracy. It is intended for medium and high throughput production lines of domestic and commercial refrigerators / freezers and other fields of application. It is designed and tested for making use of isobutane (R600a) and propane (R290). Assembly lines making use of most recent refrigerants such as R1234yf and R1234ze are also suggested for the iROCKALL HC.

Characteristics

- Microprocessor or smart OS (optional) controlled
- Charging speed: up to 25 g/s for HC/HFO refrigerants and up
- Charging capacity: according to local limitations
- High charging accuracy
- Built-in vacuum pump (20,5 m³/h)
- Available with integrated Refrigerant transfer Pump
- Interactive Colour Touchscreen

- Data Collection Application over TCP/IP protocol
- Up to 1000 programmable work cycles Microprocessor controlled
- Microprocessor controlled
- Built in according to the European Machinery Directive, Safety
- standards for Potential Dangerous Areas

The equipment is designed and assembled for the area of assembly of refrigeration units which are going to be charged with flammable gases according to the indications of the ATEX Directive 99/92/ EC. As the working areas are classified as hazardous, these equipment must be installed within a ventilated enclosure able to withhold any refrigerant leaks. The electric and hydraulic components of the vacuum and charging station have been chosen by FT to comply with ATEX for the classification of areas at high risk of explosion and thus make the whole system suitable for working with flammable liquids.

iRockall HC - Due



Touch screen machine Controller



Injectors



Main using applications

- Domestic refrigerators and deep freezers
- Professional Refrigeration
- Refrigerated show cases and cooling cabinets
- Deep Cooling for Medical Products
- Automatic food and beverage dispenser machines
- Ice-cream machines
- Dehumidifiers
- Domestic air conditioners



iRockall HC Technical Characteristics	iRockall HC - Uno	iRockall HC - DUE
Injectors/Type	1/PLUVIO V3	2/PLUVIO V3
Injector length	3,5 m	
Refrigerant metering systems	1	2
Charging capacity	Max 10 kg for HC	
Charging speed	up to 25 g/s (HC refrigerants) up to 40 g/s (HFC refrigerants)	
Charging accuracy	±0,5 g (<100 g HC), ±0,5 % (>100 g HC) ±1,0 g (<200 g HFC),	
Injector connection	¼" Hansen F (ISO 7241B)	
Refrigerant supply connection	¼" Hansen M (ISO 7241B)	
Refrigerants	HFC/HC/HFO/A2L	
compressed air supply	6÷7 bar not lubricated	
On-board alarms	3 light alarms (green/white/red) on column	
Programmable work cycles	Up to 1000	
Nominal Vacuum pump rate	20,5 m ³ /h	
Control unit	TS690	
Working temperature	5 °C .. 45 °C	
Requested Refrigerant supply	Pressurized, in liquid state	
Power Consumption	0,6 kW, with 20,5 m ³ /h vacuum pump	
Power Supply	400 V @ 50 Hz – 3ph + GND	
Dimensions (L x W x H)	850 x 600 x 1430 mm	
Weight	~170 kg	

Optional features and devices
Additional light and Acoustic Alarm
MFILL injector for High production lines
Refrigerant dosing system with Massic Coriolis flowmeter
30,2 m ³ /h Vacuum pump
Automatic working cycle selection performed by barcode reader
Remote Printer

* FT software department develops customized software on request

Company Profile

Vacuum and Charging units

HC Refrigerants handling systems

Ecologic non-Flammable Refrigerants

Vacuum and Charging Injectors

Refrigerant transfer pump

Pressure test units leak detectors

Preliminary evacuation

Electrical and functional test

Ultrasonic tube sealers